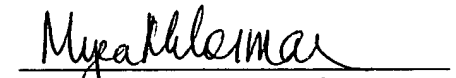
questions he or she is invited to contact the undersigned at the telephone number provided below.

Respectfully submitted,



Myra H. McCormack
Attorney for Applicants
Reg. No. 36,602

Johnson & Johnson
One Johnson & Johnson Plaza
New Brunswick, NJ 08933-7003
(732) 524-6932
Dated: December 20, 2001

VERSION TO SHOW CHANGES MADE

Amendments have been made to the claims as follows:

1. (Amended) An isolated or substantially pure form of a nucleic acid molecule capable of hybridizing to SEQ ID Nos: 1-7 or the complementary thereof and encoding a mammalian GDNF family receptor α-4 (GFRα-4).

4. (Amended) A nucleic acid molecule according to [any of] claim[s] 1 [to 3] which is a DNA molecule.

6. (Amended) An isolated nucleic acid molecule [according to any preceding claim] comprising [having] the sequence illustrated in any of SEQ ID Nos 5, 6, or 7 or the complementary sequence thereof.

8. (Amended) A GFRα-4 receptor encoded by a nucleic acid molecule according to [any of] claim[s] 1 [to 6].

9. (Amended) A DNA expression vector comprising a nucleic acid molecule according to [any of] claim[s] 4 [to 6].

12. (Amended) A host cell according to claim 10 [or 11] wherein said cell is a mammalian cell.

14. (Amended) A transgenic cell, tissue or organism comprising a transgene capable of expressing a GFRα-4 receptor protein [having] comprising the amino acid sequence illustrated in Sequence ID No's. 8 or 9 or the amino acid sequence of a functional equivalent or bioprecursor thereof.

15. (Amended) A transgenic cell tissue or organism according to claim 14, wherein said transgene comprises a nucleic acid molecule according to [any of] claim[s] 1 [to 6].

16. (Amended) A GFRα-4 receptor protein or a functional equivalent derivative or bioprecursor thereof, expressed by the cell according to [any of] claim[s] 10 [to 15].

18. (Amended) An antisense molecule comprising a nucleic acid which is capable of hybridising to the nucleic acid [according to any] of claim[s] 1 [to 6].

19. (Amended) A pharmaceutical composition comprising the [A] molecule according to claim 18 [for use as a medicament].

22. (Amended) A pharmaceutical composition comprising a nucleic acid molecule according to [any of] claim[s] 1 [to 6] together with a pharmaceutically acceptable carrier, diluent or excipient therefor.

23. (Amended) A pharmaceutical composition comprising the [a molecule according to claim 18 or a] receptor according to claim 21 together with a pharmaceutically acceptable carrier, diluent or excipient therefor.

29. (Amended) A method of determining whether a compound is an agonist, antagonist or a ligand in relation to GFRα-4 receptor, according to claim[s] 8 [or 11], which method comprises contacting a membrane preparation of cells expressing said GFRα-4 with said compound in the presence of cRET or similar protein which interacts with GFRα-4 in the signal transduction pathway of which GFRα4 is a component and monitoring the level of any interaction of GFRα-4 with cRET or said similar protein.

30. (Amended) A method of producing an antagonist or agonist of GFRα-4 comprising the steps of [a] <u>the</u> method of [any one of] claim[s 26 to] 29; and additionally

(i) synthesizing the compound obtained or identified in said method or a physiologically acceptable analog or derivative thereof in an amount sufficient to provide said antagonist or agonist in a therapeutically effective amount to a patient; and/or

(ii) combining the compound obtained or identified in said method or an analog or derivative thereof with a pharmaceutically acceptable carrier.

31. (Amended) A <u>pharmaceutical composition comprising a</u> compound identifiable as an agonist by the method according to [any of] claim[s 26 to] 29 [for use as a

medicament] together with a pharmaceutically acceptable carrier, diluent or excipient therefor.

32. (Amended) A method of promoting GFRα-4 activation in a mammal comprising administering a therapeutically effective dose of [Use of] a compound identifiable as an agonist by the method [according to any] of claim[s 26 to] 29 [in the preparation of a medicament for the treatment of neurodegenerative diseases, Alzheimers disease, Parkinsons disease, Motor Neuron Disease, peripheral neuropathy, spinal cord injury, familial hirschsprung disease, carcinomas and diseases associated with GFRα4 receptor dysfunction].

33. (Amended) A pharmaceutical composition comprising a compound identifiable as an antagonist by the method according to [any of] claim[s 26 to] 29 [for use as a medicament]together with a pharmaceutically acceptable carrier, diluent or excipient therefor.

34. (Amended) A method of limiting GFRα-4 activation in a mammal comprising administering a therapeutically effective dose of [Use of] a compound identifiable as an antagonist by the method [according to any] of claim[s 26 to] 29 [in the preparation of a medicament for the treatment of carcinomas or in alleviating pain].

36. (Amended) An antibody specific for GFRα-4 receptor protein having an amino acid sequence as illustrated in Sequence ID No's. 8 or 9 [or an amino acid sequence of a functional equivalent or bioprecursor of said receptor].

38. (Amended) A method of identifying ligands for a mammalian GFRα-4 receptor protein, which method comprises contacting a receptor encoded by a nucleic acid molecule of claim 1[according to claim 8 or 11] with a cell extract or a compound to be tested and isolating any molecules bound to said receptor.

39. (Amended) A method of determining whether a compound is a ligand for a GFRα-4 receptor, which method comprises contacting a cell expressing said receptor according to [any of] claim[s] 10 [to 15] with said compound and monitoring the level of any GFRα-4 mediated functional or biological response.

41. (Amended) A compound identifiable as a ligand for GFRα-4 according to the method of claim[s 39 or] 40 for use as a medicament.

42. (Amended) The compound of claim 41 wherein the medicament is used in [Use of a compound identifiable according to the method of claims 39 or 40 in the preparation of a medicament for] the treatment of neurodegenerative diseases, Alzheimers disease, Parkinsons disease, Motor Neuron Disease, peripheral neuropathy, spinal cord injury, familial hirschsprung disease in addition to carcinoma and diseases associated with GFRα-4 dysfunction.

43. (Amended) A kit for determining whether a compound is an agonist or an antagonist of GFRα-4 receptor protein which kit comprises a cell according to [any of] claim[s] 10 [to 15], means for contacting said cell with said compound and means for monitoring the level of GFRα-4 mediated functional or biological response in said cell.

45. (Amended) A diagnostic kit including a probe which comprises any of, a nucleic acid molecule according

to [any of] claim[s] 1 [to 6] or a fragment thereof or an antisense molecule [according] capable of binding to a nucleic acid molecule of claim 1 [to claim 18] and means for contacting biological material to be tested with said probe.

46. (Amended) A kit for determining whether a compound is a ligand of a mammalian GFRα-4 receptor protein, which kit comprises a membrane preparation from cells expressing GFRα-4, means for contacting said preparation with said compound in the presence of cRET or a similar protein involved in the signal transduction pathway of which GFRα-4 is a component and means for measuring any interaction between GFRα-4 and cRET or said similar protein.